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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,320	04/16/2004	Claude Nottin	251314US41	7893

22850 7590 05/19/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

VERDIER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,320

Applicant(s)

NOTTIN, CLAUDE

Examiner

Christopher Verdier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 11, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 12 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5-7-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Receipt and entry of Applicants' Preliminary Amendment dated April 16, 2004 is acknowledged.

Drawings

Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stiffening reinforcements (claim 5, last line), the channels that open out into the bottoms of the bathtubs (claim 10, last line), the stubs held onto the blades by adhesive or a tie surrounding the blades (claim 12, lines 2-3), and the inside surface of the casing facing the stubs being divergent (claim 13, line 3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

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even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because it is unclear on page 6, lines 32-35 how the stubs can be held on the tips of blades by adhesive or by a tie such as a hoop or a band surrounding the stubs and the ring of blades, yet still be mounted in radially slidable manner to the tips of the blades. Appropriate correction is required.

Examiner's Suggestions to Claim Language

The following are suggestions to improve the clarity and precision of the claims:

In claim 10, line 2, "the walls" may be changed to -- walls --:

In claim 10, line 3, "the bottoms" may be changed to -- bottoms --.

Claim Objections

Claim 10 is objected to because of the following informality: Appropriate correction is required.

In claim 10, line 2, "bathtub" should be changed to -- bathtubs --.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 recites that, for assembly purposes, the stubs are held on the tips of the blades by adhesive or by a tie surrounding the blades. This is unclear and contradictory to claim 1, because claim 1 from which claim 12 depends recites that the stubs are mounted in a radially slidable manner to the tips of the blades. It is unclear how the stubs can be both mounted to the tips of the blades in a radially slidable manner, while at the same time being held on the tips of the blades by adhesive or by a tie surrounding the blades, as recited in claim 12.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

North is cited to show a cooled blade tip with a bathtub and cooling channels.

Daunt and Bill are cited to show abradable turbine seals.

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Koffel is cited as the U.S. equivalent to French Patent 2,502,242, cited by Applicant.

Krueger is cited as the U.S. equivalent to French Patent 2,640,701, cited by Applicant.

Allowable Subject Matter

Claims 1-9, 11, and 13-14 are allowed.

Claim 10 contains allowable subject matter; Applicant should correct the informality therein.

No determination may be made at this time concerning claim 12, due to the indefinite nature of the claim.

The following is a statement of reasons for the indication of allowable subject matter: the French Search Report dated December 9, 2003 for the instant application lists U.S. Patent 3,117,716 and Japanese Patent Publication 62-142,805 as "X" references. The claims of the instant application are directed towards an unobvious improvement over U.S. Patent 3,117,716 and Japanese Patent Publication 62-142,805. U.S. Patent 3,117,716 discloses an arrangement substantially as claimed, including a wheel 12 mounted to rotate inside a casing 10 and carrying blades 12 whose tips are at a small radial distance from an inside surface of the casing, with means for reducing clearance between the tips of the blades and the inside surface of the casing, with the means for reducing clearance comprising stubs 18 mounted in radially slidable manner to the tips of the blades. The improvement comprises the stubs being guided in an annular

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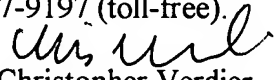
groove of the casing. Japanese Patent Publication 62-142,805 discloses an arrangement substantially as claimed, including a wheel 3 mounted to rotate inside a casing 2 and carrying blades 1 whose tips are at a small radial distance from an inside surface of the casing, with means for reducing clearance between the tips of the blades and the inside surface of the casing, with the means for reducing clearance comprising stubs 6 mounted in radially slidable manner to the tips of the blades. The improvement comprises the stubs being guided in an annular groove of the casing. None of the prior art of record discloses or suggests the improvement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.
May 13, 2005


Christopher Verdier
Primary Examiner
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